Mr. Mark Rees
Dalton Corporation, Kendallville Manufacturing Facility
200 West Ohio Street
Kendallville, Indiana 46755

Dear Mr. Rees:

Re: Exempt Construction and Operation Status,
113-12355-00004

The application from Dalton Corporation, received on June 12, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following core ovens, to be located at 200 West Ohio Street, Kendallville, Indiana, is classified as exempt from air pollution permit requirements:

(a) One (1) portable electric core oven, identified as PC01, and

(b) One (1) natural gas fired core oven, identified as C03, with a heat input rate of 2.0 mmBtu per hour

The core ovens are used to remove the water based core wash after it is applied to the cores. There are no air emissions associated with the electric core oven (emission unit PC01) and the air emissions associated with the natural gas core oven (emission unit C03) do not exceed the exemption level thresholds.

The following condition shall be applicable:

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

This existing source has submitted their Part 70 application T113-6491-00004 on August 30, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

AMM

cc: File - Noble County
Noble County Health Department
Air Compliance - Dick Sekula
Northern Regional Office
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak
Part 70 Application File - T113-6491-00004

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: **Dalton Corporation - Kendallville Manufacturing Facility**
Source Location: **200 West Ohio Street, Kendallville, Indiana 46755**
County: **Noble County**
SIC Code: **3321**
Exemption No.: **113-12355-00004**
Part 70 Permit No.: **113-6491-00004**
Issuance Date: **Not yet issued**
Permit Reviewer: **Autumn M. Marker**

The Office of Air Management (OAM) has reviewed an application from Dalton Corporation relating to the construction and operation of two (2) core ovens.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (inches)	Flow Rate (acfm)	Temperature (^{0}F)
77	core oven(s)	33	8"	960	250

Enforcement Issue

The source has an enforcement Notice of Violation (NOV) action pending regarding existing equipment contained in their Part 70 application (T1136-6491-00004). These issues are currently being reviewed by the IDEM's Office of Enforcement.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on June 12, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control

agency."

Pollutant	Potential To Emit (tons/year)
PM	0.02
PM-10	0.07
SO_2	0.01
VOC	0.05
CO	0.74
NO_x	0.88

HAP's	Potential To Emit (tons/year)
Benzene	1.840E-05
Dichlorobenzene	1.051E-05
Formaldehyde	6.570E-04
Hexane	1.577E-02
Toluene	2.978E-05
Lead	4.380E-06
Cadmium	9.636E-06
Chromium	1.226E-05
Manganese	3.329E-06
Nickel	1.840E-05
TOTAL	1.653E-02

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM and PM10 are equal to or greater than 100 tons per year for the entire source. Therefore, the source is subject to the provisions of 326 IAC 2-7. The potential emissions from the installation of the core ovens, however, does not exceed the exemption level.

County Attainment Status

The source is located in Noble County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Noble County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Noble County has been classified as attainment or unclassifiable for all pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 T-113-6491-00004 application on August 30, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted

Part 70 application.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this new facility.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this new facility.

State Rule Applicability - Individual Facilities

326 IAC 5-1-2 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

(a) These new facilities will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

(b) See attached calculations for detailed air toxic calculations.

Conclusion

The construction and operation of these core ovens shall be subject to the conditions of the attached proposed **Exemption 113-12355-00004**.

Appendix A

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: **Dalton Corporation - Kendallville Mfg Facility**
Address City IN Zip: **200 West Ohio Street, Kendallville, IN 46755**
Exemption No.: **113-12355-00004**
Plt ID: **113-00004**
Reviewer: **Autumn M. Marker**
Date: **July 11, 2000**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.0	17.5

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.0	0.1	0.0	0.9	0.0	0.7

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: Dalton Corporation - Kendallville Mfg Facility
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Reviewer: Autumn M. Marker
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HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.840E-05	1.051E-05	6.570E-04	1.577E-02	2.978E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	4.380E-06	9.636E-06	1.226E-05	3.329E-06	1.840E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.